

## IN THE CLAIMS

This listing of claims will replace all prior versions, and listings, of claims in the application:

### **Listing of Claims:**

1. (currently amended) A magnetic core having a linear B-H characteristic with a permeability, said permeability being constant within an applied field between -15 Oe and +15 Oe and at a frequency range up to about 1000 kHz~~which does not change with the level of magnetic fields applied and the frequency used.~~
2. (currently amended) A magnetic core as recited by claim 1, consisting essentially of an amorphous iron-based alloy having saturation induction ~~of at least~~exceeding ~~about~~ 10 kG (1 tesla).
3. (currently amended) A magnetic core as recited by claim 2, wherein said alloy is in the form of slit into ribbon and wound in a toroidal shape to produce said core.
4. (cancelled)
5. (currently amended) An inductor, comprising a magnetic core as recited by claim ~~43~~, ~~having~~ and a first copper winding on said core.
6. (cancelled)
7. (cancelled)
8. (currently amended) A current transformer, comprising the inductor of claim ~~65~~ and an additional copper wire winding on said core, the additional winding being adapted to carry, ~~wherein the additional wire carries~~ an electrical current to be ~~monitored or measured with accuracy.~~

9. (currently amended) A current transformer comprising the inductor of claim 75 and an additional copper wire inserted into a hollow geometrically center section of said core, ~~wherein~~ the additional wire being adapted to carryies an electrical current to be ~~monitored or~~ measured ~~with accuracy~~.
10. (currently amended) A current transformer, as recited by claim 8, wherein said first copper winding is~~having an output voltage~~ adapted to be connected to ~~for measurement by a~~ voltmeter for ~~accurate~~ measurement of the electrical current in said additional wire winding.
11. (currently amended) A current transformer, as recited by claim 9, wherein said first copper winding is~~having an output voltage~~ adapted to be connected to ~~for measurement by a~~ voltmeter for ~~accurate~~ measurement of the electrical current in said additional wire.
12. (new) A magnetic core as recited by claim 2, wherein said amorphous iron-based alloy has a composition consisting essentially of about 70-87 atom percent iron, of which up to about 20 atom percent of iron is optionally replaced by cobalt and up to about 3 atom percent of iron is optionally replaced by nickel, manganese, vanadium, titanium or molybdenum, and about 13-30 atom percent of elements selected from the group consisting of boron, silicon and carbon.